#### Work Order ID 62765

Thursday, October 07, 2010 3:13:25 PM



Page 1

Item ID:

D206-642-541

Accept

Setup Start



Revision ID:

**Item Name:** 

Replacement Skidtube

**Start Date:** 

10/7/2010

Start Qty: 1.00 **Required Date:** 10/15/2010

Req'd Qty: 1.00



Cust Item ID:

**Customer:** 

Reference:

Approvals:

**Process Plan:** 

D

Rev M

QC:

Operation

Description

Date: 10-10-57 Tooling:

Date:

SPC (Y/N):

Set Up/

**Run Hours** 

**Tool ID** 

Date:

Date:

Tool # Plan

Code

Accept Qty

Reject Qty

Reject Insp. Number Stamp

Sequence ID/

Draw Nbr **Revision Nbr** 

D3274

Work Center ID

IIN-D206-642

100

DOCUMENT CONTROL

Memo

0.00

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-541

CHG003

Run

Start

Stop

Stop

Dart Aerospace	e Ltd
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W/O:		WORK ORDER CHAN	IGES			
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr
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Part No	•	PAR #: Fault Category:	NCR: Yes	No DQ	<b>A:</b>	Date:

Resolution:		solution:	Disposition: QA: N/C Closed:					
NCR:		\	WORK OR	DER NON-CONFORMA	NCE (NCR)			
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DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
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Page 2

Thursday, October 07, 2010 3:13:25 PM

Item ID:

D206-642-541

**Revision ID:** 

Item Name: Replacement Skidtube

10/7/2010

Start Qty: 1.00 Req'd Qty: 1.00



Accept



Run

Setup Start

Stop

Start

Stop



**Required Date:** 10/15/2010

Reference:

**Start Date:** 

Ap	prov	als:

Process Plan:

QC:

Operation

**Description** 

Skidtubes

Date:

Date: Tooling:

SPC (Y/N):

0.00

0.00

Set Up/

**Run Hours** 

**Tool ID** 

**Cust Item ID:** 

**Customer:** 

Date:

Date:

Tool # Plan

Accept **Qty** 

Reject **Qty** 

Reject Number

Insp. Stamp

110



Sequence ID/

Work Center ID

Skidtubes Skidtubes

Memo

\*\*\*\*VERIFY AND INSPECT THE MATERIAL PRIOR TO USE\*\*\*\*

1- Bend FWD end of tube using bend prog D3274 FWD and foilo 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and QSI0035 AR Aluminum Rod Batch: 111385

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

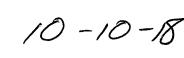
6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

Code



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W/O:			W	ORK ORDER CHANGE	S				· ·	
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#### Work Order ID 62765

Thursday, October 07, 2010 3:13:25 PM



Page 3

Item ID:

D206-642-541

Accept



Setup Start

Stop



**Revision ID:** 

Replacement Skidtube Item Name:

**Start Date:** 

10/7/2010

Start Qty: 1.00

**Required Date:** 10/15/2010

QC:

Req'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Date:\_\_\_\_\_

Tooling:

SPC (Y/N):

Set Up/

Date:

Date:

Run

Start



Stop

Sequence ID/ Work Center ID

120

HandFinish Hand Finishing Operation Description

Chemical Conversion Coat per QSI005 4.1

**Run Hours** 

0.00

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Insp. Number Stamp

130

OC Quality Control QC3- Inspect Part Finish

Memo

Memo

0.00

0.00

140

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

W/O:		WORK ORDER CH	ANGES		-		
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Thursday, October 07, 2010 3:13:25 PM

Item ID:
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D206-642-541

Accept



Setup Start

Stop



Revision ID:

Item Name: Replacement Skidtube

**Start Date:** 

10/7/2010

Start Qty: 1.00

**Required Date:** 10/15/2010 Req'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

Reference:

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Process Plan:

Operation

Skidtubes

Description

Date:

**Tooling:** 

Date:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Set Up/

**Run Hours** 

Tool ID

Tool # Plan

Code

Accept Qty

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Reject Reject **Qty** Number

Stop

Insp. Stamp

Work Center ID 150

Skidtubes

Sequence ID/

Skidtubes

0.00

0.00

1-Open Ø0.313" and 0.375" crossbolt spacer holes using DT8743 as per Dwg D3274

2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

3-Bond web in place as per Dwg D3274 & QSI 015. A/R  $\square$  Sikaflex-291  $\square$   $\square$ 

Sikaflex expire date: O( /20// Start: 0/0/0/20 Time: 2:00 Finish: 0 (0 0 79 OTime: 0 8 4) Am

(Adhere for 12 hours)

QC5- Inspect part completeness to step on W/O

BE 10/19/28

QC

Quality Control

Memo

0.00 8 10/0/29

W/O:			V	ORK ORDER CHANG	ES				
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#### Work Order ID 62765

Thursday, October 07, 2010 3:13:25 PM



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Item ID: Revision ID: D206-642-541

Accept

Setup Start

Stop



Item Name:

Replacement Skidtube

**Start Date:** 10/7/2010 **Required Date:** 10/15/2010

Start Qty: 1.00 Req'd Qty: 1.00

**Cust Item ID:** Customer:

Reference:

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Process Plan: \_\_\_\_\_

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Tooling:

Date: Date:

Stop

Start

Sequence ID/

**Work Center ID** 

QC:

Date:\_\_\_\_\_

SPC (Y/N):

Tool ID

Tool # Plan

Code

Accept Qty

Reject Qty

Run

Reject Number

Insp. Stamp

170



Skidtubes Skidtubes

Operation Description

Skidtubes

Set Up/ **Run Hours** 

0.00

0.00

Memo

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install . drop pins in crossbolt spacer holes to maintain web position.

2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2 OPEN HOLES TO .297". Deburr

3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES) REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

180

QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

Memo

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W/O:			W	ORK ORDER CHANG	ES			-		
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Page 6

Work Order ID 62765 Thursday, October 07, 2010 3:13:25 PM Item ID: D206-642-541 **Revision ID:** Item Name: Replacement Skidtube Start Oty: 1.00 **Start Date:** 10/7/2010 **Required Date:** 10/15/2010 Reference: Approvals: QC: Sequence ID/ **Work Center ID** 190


Accept



Setup Start

Stop



Req'd Qty: 1.00

**Cust Item ID: Customer:** 

Process Plan:

Date:

Tooling:

Date:

Tool ID

Run Start



Date:

SPC (Y/N):

Date:

Stop

Skidtubes Skidtubes

**Operation** Description

Set Up/ **Run Hours** 

Tool # Plan Code

Accept Qty

Reject Reject Qty Number

Insp. Stamp

Skidtubes

Memo

0.00

0.00

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use

aluminum rod

A/R□□Aluminum Rod□ /////

3-Grind cross bolt welds flush as per Dwg D3274.

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.

200

QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

W/O:			V	ORK ORDER CHAN	GES					•
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#### Work Order ID 62765

Thursday, October 07, 2010 3:13:25 PM



Page 7

Item ID:

D206-642-541

Accept



Setup Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

**Start Date:** 

10/7/2010

Start Oty: 1.00

**Required Date: 10/15/2010** Reg'd Oty: 1.00



Date:

**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Tooling: SPC (Y/N): Date:

Run

Otv

Start

Stop



OC:

Sequence ID/

Operation

QC10- Inspect visual per OSI004- ground welds

Set Up/ **Run Hours** 

**Tool ID** 

Date:

Tool # Plan Code

Reject Accept Qty

Reject Number

Insp. Stamp

210

**Work Center ID** 

Quality Control

Description

Memo

0.00

=> He 10/11/02 / Ø

220

HandFinish

Hand Finishing

Memo

Pressure Wash per OSI005 4.3

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch

230

Powdercoat Powder Coating White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

0.00

1 Blo-11-2

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W/O:			W	ORK ORDER CHANG	GES					
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Thursday, October 07, 2010 3:13:25 PM



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Item ID:

D206-642-541

Accept

Setup Start



Revision ID:

Item Name: Replacement Skidtube

**Required Date: 10/15/2010** 

Stop

**Start Date:** 

10/7/2010

Start Oty: 1.00 Rea'd Oty: 1.00

Cust Item ID: Customer:

Reference:

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Process Plan:

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Tooling:

Date:

Run Start

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OC:

Date:

SPC (Y/N):

Set Up/

Date:

Tool ID

Stop

Insp.

Sequence ID/ Work Center ID ·

240

Quality Control

Operation Description

QC3- Inspect Part Finish

Memo

0.00

Run Hours 10/11/03 Code

Tool # Plan

Accept

Otv

Number Stamp

Reject

250

HandFinish

HandFinishing

Memo

0.00

0.00

=> 94 10/11/03/1

Hand Finishing

-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets. A/R | N/A | LPS-3 | A/L ( ) 9 9 5 6

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a A/R $\square$ Sikaflex-291  $\square$  // || ||

Sikaflex expire date:

1 (C 1 0 C

260

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Siolulos

Memo Inspect Nut Plate & Inserts

W/O:			W	ORK ORDER CHANG	ES			
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date C	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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#### Work Order ID 62765

Thursday; October 07, 2010 3:13:25 PM



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Setup Start

Run

Stop

Start

Item ID: D206-642-541 Accept **Revision ID:** Item Name: Replacement Skidtube **Start Date:** 10/7/2010 Start Qty: 1.00 **Cust Item ID: Required Date:** 10/15/2010 Req'd Qty: 1.00 **Customer:** Reference: Process Plan: Date: Approvals: Date: Sequence ID/ Operation Work Center ID **Description** 270 HAND FINISHING RESOURCE #1 HandFinish Memo Hand Finishing 1-Install wearpads & gaskets as per Dwg 2-Install ring as per Dwg D3274 Sikaflex expire date: 1110

QC5- Inspect part completeness to step on W/O

Date	100mg:	Date:					
Date:	SPC (Y/N):	Date:			Sto	p	
on ion	Set Up/ Run Hours	Tool ID T	ool # Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
NISHING RESOURCE #1	))	10/11/0	) }	1	$\mathcal{S}$		
Memo	0.00			-		- · · · · · · · · · · · · · · · · · · ·	
1-Install wearpads & gaskets as per	Dwg D3274.						
2-Install ring as per Dwg D3274 A/R□□Sikaflex-291 □	<del></del> ,						
3-Inspect for foreign objects as per	QSI 024						
4-Spray inside of tube on both side A/R LPS-3 Batch:	s of web with LPS-3						
5-Install Aft Cap and seal with Sika A/R   Sikaflex-291   A/Cap Sikaflex expire date:	flex. Clean excess adhesive.						

280

s wy /03

Memo

0.00

Quality Control

W/O:			W	ORK ORDER CHANG	ES				
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#### Work Order ID 62765

Thursday, October 07, 2010 3:13:25 PM



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Item ID:

D206-642-541

Accept

Setup Start

Stop



**Revision ID:** 

Item Name:

Replacement Skidtube

**Start Date:** 

10/7/2010

Start Qty: 1.00

**Required Date: 10/15/2010** 

Req'd Qty: 1.00



**Cust Item ID: Customer:** 

Date:

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Process Plan:

QC:

Operation

Description

Date:

Date:

Tooling:

Run

Start

Stop



SPC (Y/N): Set Up/

**Tool ID** 

Tool # Plan

Accept Reject

Reject

Insp.

Sequence ID/ Work Center ID

290

Packaging Packaging

Memo

Identify as per dwg & Stock Location:

PPP62753

**Run Hours** 

0.00

Qty Code

Number Stamp

300

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/12/03 9%) MF 10-12-02

W/O:			W	ORK ORDER CHANGE	ES				
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#### **Picklist Print**

Thursday, October 07, 2010 3:13:29 PM

Work Order ID: 62765

Parent Item:

D206-642-541

Parent Item Name:

Replacement Skidtube



**Start Date:** 10/7/2010

**Required Date: 10/15/2010** 

Page 1

Start Otv: 1.00

Required Oty: 1.00

Comments:

IPP Rev:B□05.09.23□Revised per D206-642 Rev. J□KJ/JLM

IPP Rev:C 07-02-23

Added SS Wearplates & Gaskets JLM

IPP Rev:E

IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD as per PAR 08-015 DD verified by:EC

IPP Rev:F

08-04-17 08-06-02

add comment DD verified by:EC

IPP Rev:G

revise details DD verified byEC 08-10-09

Decidion   Cape   Cap	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
Location   Loc Oty   Loc Code			Manufactured	No			110	Each	73.0000		1			
D3285-1    Manufactured	Extrusion Round 3" 206					47575	Loc	73 25	Loc Code			JF.	0	-10 n
LG			Manufactured	No	·	398/4	110		141.0000	1 	1			
D3282-041   Manufactured   No   150   Each   2.0000   1   1					<b>Location</b>	<u>1</u>	Loc	<u>Qty</u>	Loc Code					
D3282-041 Manufactured No 150 Each 2.0000 1 1 Float Web (206L/407)  Location LG 2 Loc Code  LG 2					LG			141				_		
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Float Web (206L/407)  Location LG 2  Loc Oty Loc Code LG 2	D2282 041					52647	0			_	_/_	_ OK	10-10-	Ψ
Location         Loc Oty         Loc Code           LG         2			Manufactured	No			150	Each	2.0000		1			
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59886 2					LG			2		_		_		
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		Description of NC		Corrective Action Section	ection B Verificatio			Approval		
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Picklist Print
Thursday, October 07, 2010 3:13:29 PM

Work Order ID: 62765									700	
Parent Item: D206-642-541										
Parent Item Name: Replacement Skidtu	ibe				•		tart Date: I Start Qty: I		Required Date: Required Qty:	
D2649	Manufactured	No		190	Each	65.0000	1	1		
Cross Bolt Spacer			cation	Lo	oc Qty	Loc Code	B	6288	39 1/2	BE10/11
		LG	58545 60652 61496		65 2 4 59				- - -	001717
D3275-1  Crossbolt Spacer	Manufactured	No	01470	190	Each	216.0000	12	12	-	v · .
Clossion Space		Loc	cation	Le	oc Qty	Loc Code			F	*.
		LG	53453 61646''' 62399		216 8 102 106		:	12	- BE	10/11/01
CR3212-4-03	Purchased	No		250	Each	1,888.000	2	2 11	0111103	، عمد ا
		<u>Lo</u> c ST:	2ation 311 111359 112314 114436 114450 114859	<u>L</u> .	1888 5 2 448 71 1362	<u>Loc Code</u>			- - - -	•
D3415-041	Manufactured	No		250	Each	52.0000	1   <b>             </b>	1 <u>}</u>	10/11/03	*
		Loc	cation	Le	oc Oty	Loc Code				•
•		ST	056 <u>33842</u>		52 52			<u></u>		
Thursday, October 07, 2010 3:13:29 F	PM			acket Print						Page 2

Dart Aeros	pace Ltd
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DATE STEP PROCEDURE CHANGE By Date	Approv			
DATE STEP PROCEDURE CHANGE By Date	Oty Chief Eng Prod Mg	Approvai		
Part No: PAR #: Fault Category: NCR: Yes No DQA:	: Date	<u>.</u>		
Resolution: Disposition: QA: N/C Closed:				
NCR: WORK ORDER NON-CONFORMANCE (NCR)				
DATE STEP Description of NC Corrective Action Section B Verifica Section A Section A Section A Section B S				
Section A Initial Action Description Sign & Section Chief Eng Chief Eng Chief Eng Chief Eng Section	n C Chief En	g QC Inspector		

Thursday, October 07, 2010 3:13:29 PM

Work Order ID: 62765 Parent Item: D206-642-541 Parent Item Name: Replacement Skidtube **Required Date: 10/15/2010** Start Date: 10/7/2010 Start Qty: 1.00 Required Oty: 1.00 CCR264SS3-3 Purchased No 250 Each 446.0000 Cherry Rivet Location Loc Oty Loc Code ST311 446 112314 4 113539 44 113973 398 ALS4-1032-130 Purchased No 250 Each 1.147.000 78 78 10/11/63 Insert Location Loc Qty Loc Code x 78 PKG11 1115911 1098 114723 1098 ST282 10 110511 10 ST381 39 114654 39 D3536-15 Manufactured No 270 Each 21.0000 Gasket Location Loc Qty Loc Code FP 56055 60875 8 FP11 12 59238 1 62459 11

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W/O:	7		W	ORK ORDER CHANG	ES				٠
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
NCR:  DATE STEP Description	PAR #:	Fault Cat	egory:	_ NCR: Ye	s No D	QA:	Date: _		
	Resolution:		Dispositi	on:	_ QA: N/C	Closed: _		Date: _	
NCR:		\	WORK OR	DER NON-CONFORMA	ANCE (NO	CR)			
DATE	STED	Description of NC			ion B	Ver	ification	Approval	
DAIL	JIEF	SIEP Section A	Initial Chief Eng	Action Description Chief Eng	Sig: Da		ection C	Chief Eng	QC Inspector
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Thursday, October 07, 2010 3:13:29 PM

Work Order ID: 62765 Parent Item: D206-642-541 Parent Item Name: Replacement Skidtube **Required Date: 10/15/2010** Start Date: 10/7/2010 Start Qty: 1.00 Required Qty: 1.00 D3536-23 Manufactured No 270 Each 8.0000 10/11/03 Gasket Loc Qty Location Loc Code FP011 61237 D3536-35 Manufactured No 270 Each 23.0000 Gasket Location Loc Qty Loc Code FP012 23 58683 1 61692 10 62462 12 D3536-39 Manufactured No 270 Each 12.0000 Gasket Location Loc Qty Loc Code FP12 12 58215 1 58571 11 D3535-15 Manufactured 270 No 12.0000 Each Wearshoe Location Loc Qty Loc Code FP18 12 61241 6 62241

W/O:			W	ORK ORDER CHANGI	ES			• • • •
DATE	STEP	PRO	CEDURE CHA	ANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	, Approval QC Inspector
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	:							
		PAR #:	Fault Cate	egory:	NCR: Yes	No DQA:	Date: _	<u> </u>
	R	esolution:	Disposition	on:	_ QA: N/C Cld	osed:	Date: _	
NCR:		V	VORK ORD	ER NON-CONFORMA	NCE (NCR	)		
DATE	STEP	Description of NC		Corrective Action Section		Verification	Approval	Approval
DAIL	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
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Thursday, October 07, 2010 3:13:29 PM

Work Order ID: 62765 Parent Item: D206-642-541 Parent Item Name: Replacement Skidtube **Required Date: 10/15/2010** Start Date: 10/7/2010 Start Qty: 1.00 Required Qty: 1.00 D3535-35 Manufactured No 270 Each 8.0000 Wearshoe Location Loc Qty Loc Code FP018 60865 D3535-39 Manufactured No 270 Each 17.0000 M jolicoz Wearshoe Location Loc Oty Loc Code FP18 17 58214 1 60233 16 D3535-23 Manufactured No 270 19.0000 Each Wearshoe Location Loc Qty Loc Code FP 7 61830 7 FP021 20 60231 11 D3537-3 Manufactured 270 No Each 6.0000 Wearpad Location Loc Qty Loc Code FP17 60866

W/O:			W	ORK ORDER CHANG	ES			•
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Part No	•	PAR #:	Fault Cat	egory:	NCR: Yes	No <b>DQA:</b>	Date: _	
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	OTED	Description of NC		Corrective Action Section		Verification	Approvai	Approval QC Inspector
DATE	DATE STEP Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng		
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Work Order ID: 62765

Parent Item:

D206-642-541

Parent Item Name: Replacement Skidtube



Start Date: 10/7/2010

**Required Date: 10/15/2010** 

Start Qty: 1.00

Required Qty: 1.00

D3537-1

Wearpad

Manufactured	No

270

Each

14.0000



<b>Location</b>	Loc	: Oty	Loc Code		
FP		1	B 62209		ve
55465		1	() = = = = (		
FP017		6			
61986		6			
FP17		7			
57713		3			
60491		3			
61640		1	•		
	270	Each	29.0000	80	80

AN960C10L

NAS1149C0332 R

Purchased

No

No

10/11/03

JK 10/11/03

washer

AN960C416

NAS1149C0463

Purchased

ST245

Location

270

107534

Loc Qty 29 29

Each

M 115832 100.0000

Loc Code

washer

Location Loc Qty ST346 100 100993 100

Loc Code

M 115358

W/O:	//0:		WORK ORDER CHANGES								
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr  Approv QC Inspec			
Part No:        PAR #:F           Resolution:        D           NCR:         WOR           DATE         STEP         Description of NC Section A	Fault Categ	ory:	NCR: Yes	No <b>DQ</b>	A:	Date:					
	Re	esolution:	Disposition	:	_ QA: N/C C	losed:	· · · · · · · · · · · · · · · · · · ·	Date: _			
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCI	7)					
	STEP	Description of NC Section A	Initial Action Description		on B	Sect	cation	Approval Chief Eng	Approval QC Inspector		
-,			Chief Eng	Chief Eng	Date						
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### **Picklist Print**

Page 7

Thursday, October 07, 2010 3:13:29 PM Work Order ID: 62765 Parent Item: D206-642-541 Parent Item Name: Replacement Skidtube Start Date: 10/7/2010 **Required Date: 10/15/2010** Start Oty: 1.00 Required Oty: 1.00 D3672-1 Manufactured No 270 Each 855.0000 41 10/11/03 Phenolic Washer Location Loc Otv Loc Code ST077 855 42329 150 52505 705 AN3C4A Purchased No 270 Each 1,650.000 10/11/03 BOLT Location Loc Qty Loc Code ST245 20 110139 20 ST303 42 115438 42 ST350 1588 114108 14 114416 12 114523 2 115300 560 V80 1000 115589 AN4C5A Purchased 270 No Each 489.0000 BOLT Location Loc Qty Loc Code ST346 489

485

110552 112243

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W/O:			WO	RK ORDER CHANGES	3				* , , , ,
DATE	STEP	PRO	CEDURE CHAN	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								Chief Eng / Prod Mgr  Date: Date:	
Part No	:	PAR #:	Fault Categ	jory:	NCR: Yes	No <b>DQ</b>	A:	Date: _	
Re		esolution:	Disposition	<b>1:</b>	QA: N/C CI	osed:		Date: _	
NCR:		V	WORK ORDE	R NON-CONFORMAN	CE (NCF	R)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	Sign &		<b>cation</b> ion C		Approval QC Inspector
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Thursday, October 07, 2010 3:13:29 PM

Work Order ID: 62765

Parent Item:

D206-642-541

Parent Item Name: Replacement Skidtube



**Start Date:** 10/7/2010

**Required Date:** 10/15/2010

Start Qty: 1.00

Required Qty: 1.00

D2646

Aft Cap

Manufactured No 270

Each

44.0000

10/11/03

Location	<u>on</u>	<u>]</u>	Loc Oty	Loc Code		
FP-4			39			
	57332		39			
fp5			1			
	61752		1			
FP6			4			
	52663		4			
		270	Each	31.0000	1	1

D3413-1

Ring

Manufactured

11 10/11/03

<u>_ocation</u>	Loc Oty	Loc Code	
ST473	31		
51586	1		
53446	15		
61322	15		X (

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W/O:			WO	RK ORDER CHANGES	3	<del></del>		• ^ • •
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #:						
Resolution:		Disposition	•	QA: N/C Clo	sed:	Date: _		
NCR:				R NON-CONFORMAN				
		Description of NC	Corrective Action		В	Verification	Approval	Ammayal
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector
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DESIG	CP	DRAWN BY	DART AEROSPACE USA, INC.
CHECK	KED 🚜	APPROVED #	DRAWING NO. REV. D
	#	-#	D3274 SHEET 1 OF 4
DATE			TITLE SCALE
06.1	2.19		SKIDTUBE ASSEMBLY NTS
Α		04.03.15	NEW ISSUE
В		04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76
С		05.03.16	ADD -043; NEW INSERTS
D		06.12.19	NEW INSERTS, SS WEARSHOE + GASKET



Qty -041	Qty -043	Part Number	Description
X	-0-10	D3274-041	SKIDTUBE ASSEMBLY
_^_	X	D3274-043	SKIDTUBE ASSEMBLY
		50274-046	UND TODE NOTINGE
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING SHOD
1	1	D3415-041	RING SHOP COPY
1	1	D3535-15	NUT PLATE  WEARSHOE  WEARSHOE  WEARSHOE  WEARSHOE
1	1	D3535-23	
1	1	D3535-35	WEARSHOE SUB- TROLLS
1	1	D3535-39	WEARSHOE CODE
1	1	D3536-15	WEARSHOE  WEARSHOE  WEARSHOE  WEARSHOE  GASKET  GASKET  WITH TO THE TOTAL OF THE TO
1	1	D3536-23	GASKET  GASKET  GASKET  GASKET  WORD  WEARPAD  WEARPAD
1	1	D3536-35	GASKET NO ORINGE
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
		44.02.400.400	
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

#### **GENERAL NOTES:**

- 1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2. DAMAGE TOLERANCE ON FWD BEND:

THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE

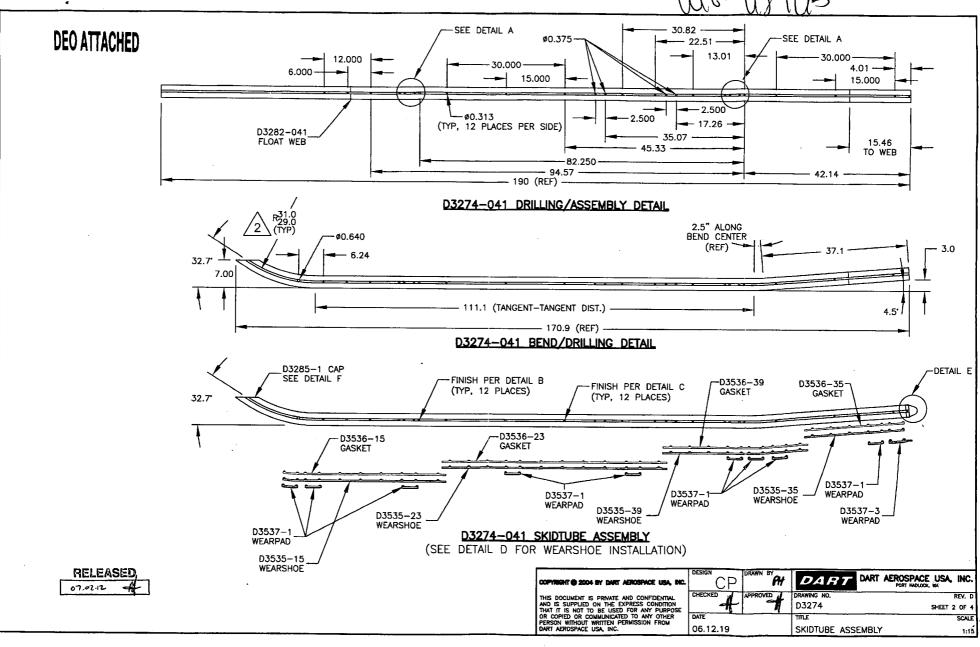
- 3. ALL HOLES DRILLED ON CENTERLINES.
- 4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
- 5. WELDING TO BE DONE PER DART QSI 004.
- 6. FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- 7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
- 8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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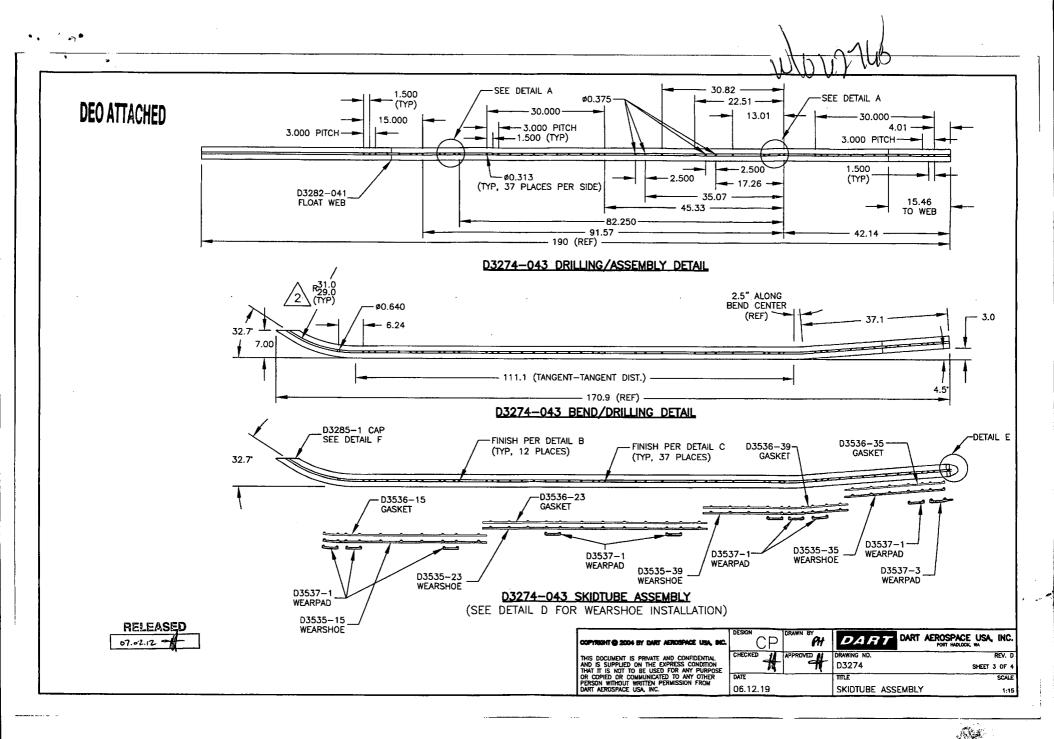
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W/O:			WORK ORDER CHANGES									
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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						· .						
Part No: PAR # Resolution: PAR #		PAR #:	Fault Categ	ory:	NCR: Yes	No <b>DQ</b>	A:	Date:				
		esolution:	Disposition	:	QA: N/C CI	osed:		Date:				
		·	WORK ORDER NON-CONFORMANCE (NCR)									
DATE	CTED	Description of NC		n B	Verific	cation	Approval	Approval				
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date		Section C	Chief Eng	QC Inspector			
	}											
						:						

30.82 -SEE DETAIL A - 22.51 13.01 30.000 4.01 -15.000 - 2.500 <del>----</del> 17.26 --35.07 15.46 TO WEB 42.14 2.5" ALONG BEND CENTER (REF) - 3.0 4.5 -DETAIL E -D3536-39 D3536-35-GASKET GASKET D3537-1 D3535-35 WEARPAD D3537-1 WEARSHOE WEARPAD D3537~3 WEARPAD

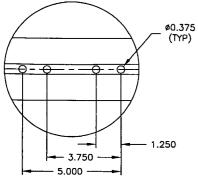


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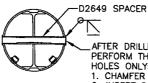


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Resolution:			Disposition:			N/C Clo	sed:		Date: _	
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DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Sec Action Description Chief Eng	ction B	Sign & Date		cation on C	Approval Chief Eng	Approval QC Inspector
				Olito Eng						
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# DETAIL A: DRILL DETAIL



DETAIL B FOR Ø0.375 HOLES ONLY



AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR \$0.375 HOLES ONLY:

- 1. CHAMFER HOLE 0.030x45° 2. INSERT D2649 SPACER
- 3. WELD INTO PLACE AND GRIND FLUSH
- 4. C'BORE TO Ø0.313x0.75 DEEP

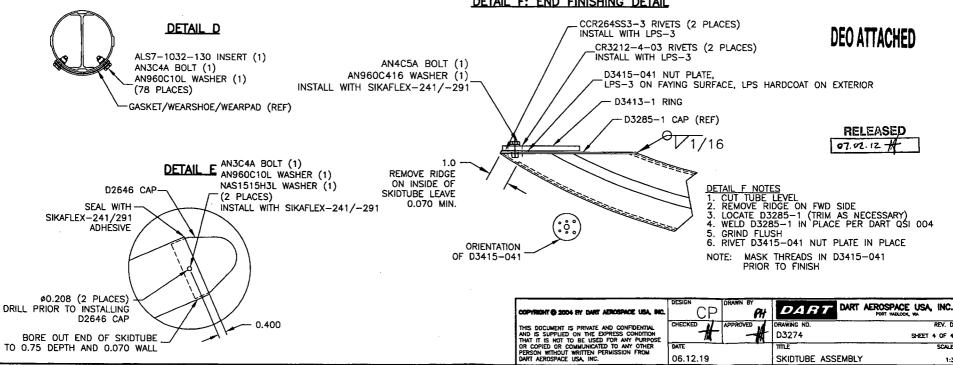
DETAIL C FOR Ø0.313 HOLES ONLY -D3275-1 SPACER CHAMFER 0.030x45°

06.12.19

(TYP)

SKIDTUBE ASSEMBLY

#### DETAIL F: END FINISHING DETAIL



W/O:		WORK ORDER CHANGES											
DATE	STEP	PRO	CEDURE CH	IANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
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-													
		PAR #:	Fault Ca	tegory:	NCR: Yes	No DQA:	Date:						
	Re	esolution:	Disposit	ion:	QA: N/C Clo	sed:	Date: _						
NCR:			VORK OR	DER NON-CONFORMA	NCE (NCR)								
DATE	STEP	Description of NC	Initial	Corrective Action Section	on B Sign &	Verification		Approval					
		Section A	Chief Eng	Action Description Chief Eng	Date	Section C	Chief Eng	QC Inspector					
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TRAWING N	NO.	TITLE	REV. D	DART AEROSPACE USA, II	NC D.E.O. NO.	SHEET NO.	SCALE
D3274	i	SKIDTUBE ASSEMBLY		<b>ENGINEERING ORDER</b>	D3274-D-1	SHEET 1 OF 1	NTS
DRAWN	A	CHECKED	4	MFG. APPR.	APPROVED , M	DE APPR.	
DATE	09.06.	17 DATE 04.06.	23	DATE 59/06/23	DATE 09/05/23	DATE 09.06.23	

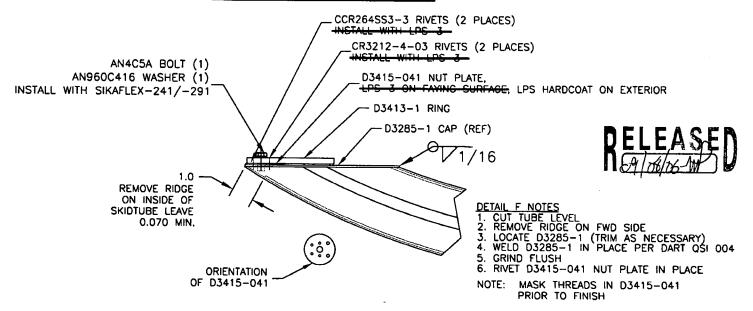
LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.

COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

#### **DETAIL F: END FINISHING DETAIL**



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Part No	) <b>:</b>					NCR: Yes	No DQ	<b>4</b> :	Date: _	
	R	esolution:	_ Disposit	tion:		QA: N/C CI	osed:		Date: _	
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DATE	STEP	Description of NC Section A	Initial	Corrective Action Des	cription	Sign &	Verific Section		Approval Chief Eng	Approval QC Inspector
<u> </u>			Chief Eng	Chief E	:ng	Date				<u> </u>
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NO. 241

# AWS D17.1.2001 QUALIFICATION TEST RECORD

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# TEST REQUIREMENTS AND RESULTS

pass[i] fail[] pass[] fail[]
pass[.] fail[] pass[.] fail[] pass[.] fail[] pass[.] fail[] pass[.] fail[] pass[.] fail[]
Date of Test Coupon

The above named individual is qualified in accordance with AWS D17.1.2001 to weld.